

No.

9600231



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Svalof Weibull A B

Whereas THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMERICAL GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA, FIELD

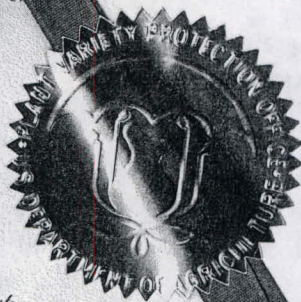
'Carneval'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of January, in the year of our Lord two thousand one.

Attest:

Acting Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Svalöf Weibull AB		SV E 36121	CARNEVAL
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)		5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY PVPO NUMBER 9600231
S-268 81 Svalöv, SWEDEN		705-324-3293	
7. GENUS AND SPECIES NAME		6. FAX (include area code)	F I L I N G DATE 5-27-96 [REDACTED]
Pisum sativum		705-324-2550	
8. FAMILY NAME (Botanical)		FILING AND EXAMINATION FEE:	
Leguminosae		FEE \$ 2450.00	
9. CROP KIND NAME (Common name)		DATE 4-19-96	
Field Pea		CERTIFICATION FEE \$ 300.00	
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name)		DATE 9/12/00	
Limited Company			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION		12. DATE OF INCORPORATION	
Sweden		1992	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS		14. TELEPHONE (include area code)	
<p><i>RWS 8-4-2000</i></p> <p>Bonis & Company <i>Howard K. Love</i> P.O. Box 217 <i>Svalöf Weibull Ltd.</i> Lindsay, Ontario, Canada K9V 5Z4 <i>2-411 Downey Rd., Saskatoon, SK, Canada S7N 4L8</i></p>		<p>306-477-5230 705-324-0544</p>	
		15. FAX (include area code)	
		<p>705-324-2550 306-477-5239</p>	
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)			
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act?)			
<input checked="" type="checkbox"/> YES (If "yes," answer items 18 and 19 below) <input type="checkbox"/> NO (If "no," go to item 20)			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		<input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?			
<input checked="" type="checkbox"/> YES (If "yes," give names of countries and dates) <input type="checkbox"/> NO			
CANADA May 1993			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.			
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.			
Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s))		SIGNATURE OF APPLICANT (Owner(s))	
<i>Howard K. Love</i>			
NAME (Please print or type)		NAME (Please print or type)	
Howard K. Love			
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
Canadian Research Director	Apr. 15/96		Apr. 15/96

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A, B, C, E; (3) at least 2,500 viable untreated seeds, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in a public repository prior to issuance of a certificate; (4) check drawn on a U.S. bank for \$2,450 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (*See Section 97.175 of the Regulations and Rules of Practice.*) Partial applications will be held in the PVPO for not more than 30 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the Certificate.

Plant Variety Protection Office
Telephone: (301) 504-5518

ITEM

- 16a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.
- 16b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
- (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences;
- (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 16c. Exhibit C forms are available from the PVPO for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 16d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 16e. Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employee of the breeder, the owner through purchase or inheritance, etc.
17. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant may NOT reverse this affirmative decision after the variety has been sold and so labelled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (*See P.L. 103-349 for additional information.*)
20. See Sections 41, 42, and 43 of the Act and Section 97.175 of the regulations for eligibility requirements.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing change of ownership or assignment is specified in Section 97.175 of the regulations. (*See Section 101 of the Act, and Section 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.*)

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: See Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Washington, DC 20260; and to the Office of Management and Budget, Paperwork Reduction Project (OMB No. 0581-0055), Washington, DC 20503.



Revised April 10/97

PVP Application No. 9600231 - CARNEVAL PEA

EXHIBIT A

- a) The variety was bred at Svalöf Weibull AB, Svalöv, Sweden. The original cross (Bohatyr x Rigel) was done in 1981. The breeding method was a pedigree method. Selection criteria (2) were for semi-leafless plants; round, yellow seeds; maturity; stiff straw and high yield. The variety originates from a single plant selection in F₄.
- b) Carneval has been observed to be uniform and stable for 10 generations. Carneval was entered in the Western Canada Pea Co-Op in the years 1990, 1991 and 1992, where it was found to be uniform and stable (3).
- c) Recurring variants have not been observed.

Svalof Weibull Seed Ltd.

P.O. Box 217
208 St. David St.
Lindsay, Ontario
CANADA K9V 5Z4

Tel: (705) 324-3293
Fax: (705) 324-2550
E-mail: hlove@swseed.ca
www.swseed.ca

Variety: Carneval (SV E 36121) Pea

EXHIBIT B

Revised November 5, 1997

Statement of Distinctness:

Of varieties known to us, Carneval is most similar to the variety, "Canis". Carneval can be distinguished from Canis as evidenced by the attached statistical comparisons with respect to the following three traits. Carneval has significantly ~~larger~~ *smaller and lighter* seeds, shorter and narrower stipules than Canis.

as per fax of 7-7-2000 RWS 8-4-2000

Characteristic (see ANOVA tables)	Year	Reps	Carneval (SV E 36121)	Range	Canis	Range
Thousand Grain Weight (grams)	1996	5	246.42	(230 - 265)	271.08	(262 - 281)
	1997	10	229.82	(218 - 240)	256.04	(246 - 263)
Stipule Length (cm)	1996	10	4.44	(3.8 - 5.1)	4.61	(3.9 - 5.5)
	1997	20	4.85	(2.6 - 6.7)	5.65	(4.4 - 6.5)
Stipule Width (cm)	1996	10	2.13	(1.6 - 3.0)	2.41	(1.9 - 2.8)
	1997	20	2.28	(1.4 - 3.0)	2.46	(1.6 - 3.2)

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E-mail: hlove@swseed.ca
www.swseed.ca

9600231

**Svalöf Weibull****Svalof Weibull Ltd.**

2 - 411 Downey Road Tel: (306) 477-5230
Saskatoon, SK Fax: (306) 477-5239
CANADA S7N 4L8 www.swseed.ca
E-mail: howard.love@swseed.se

Facsimile Transmission

July 7, 2000

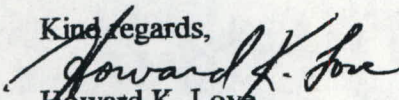
Page 1 of 1

TO: PVP Office
ATT: Bob Schelgal
FROM: Howard K. Love
RE: Modified Wording of Distinctness Carneval 9600331

Dear Bob:

Please make the change as discussed. The sentence should read in Exhibit B, Statement of Distinctness: "Carneval has significantly smaller and lighter seeds,"

Kind regards,


Howard K. Love

AGROBASE/4 ANALYSIS OF VARIANCE
 PROC ACB
 11/10/97 CARNEVAL + CANIS 96/97 TGW ANOVA TABLE

Dependent variable: TGW

Source	df	SS	MS	F-value	Pr > F
Total	29	8355.930			
ENTRY	1	4953.675	4953.675	41.25	0.0000
BLOC	4	519.815	129.954	1.08	0.3880
Residual	24	2882.440	120.102		

Grand mean = 248.203 R-squared = 0.6550 C.V. = 4.42%

LSD for ENTRY = 6.8464 S.E.D. = 4.0017

t (1-sided $\alpha=0.050$, 24 df) = 1.7109 MSE = 120.10167

ENTRY

Averages

Level --- Y --- Rank

2	261.05	1 CANIS
1	235.35	2 CARNEVAL

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AGROBASE/4 A N A L Y S I S O F V A R I A N C E
 PROC ACB
 11/06/97 CARNEVAL + CANIS 1996 TGW ANOVA TABLE

Dependent variable: TGW

Source	df	SS	MS	F-value	Pr > F
Total	9	2606.245			
ENTRY	1	1520.289	1520.289	11.06	0.0301
BLOC	4	536.180	134.045	0.98	0.5095
Residual	4	549.776	137.444		

Grand mean = 258.750 R-squared = 0.7891 C.V. = 4.53%

LSD for ENTRY = 15.8070 S.E.D. = 7.4147

t (1-sided $\alpha=0.050$, 4 df) = 2.1319 MSE = 137.44400

ENTRY

Averages

Level --- Y --- Rank

2	271.08	1 CANIS
1	246.42	2 CARNEVAL

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AGROBASE/4 ANALYSIS OF VARIANCE
 PROC ACB
 11/10/97 CARNEVAL + CANIS 1997 TGW ANOVA TABLE

Dependent variable: TGW

Source	df	SS	MS	F-value	Pr > F
Total	19	4081.202			
ENTRY	1	3437.442	3437.442	100.59	0.0000
BLOC	4	165.357	41.339	1.21	0.3505
Residual	14	478.403	34.172		

Grand mean = 242.930 R-squared = 0.8828 C.V. = 2.41%

LSD for ENTRY = 0.0000 S.E.D. = 2.6143

t (1-sided $\alpha=0.050$, 14 df) = 0.0000 MSE = 34.17164

ENTRY

Averages

Level --- Y --- Rank

1	256.04	1 CANIS
2	229.82	2 CARNEVAL

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AGROBASE/4 ANALYSIS OF VARIANCE
 PROC ACB
 11/06/97 CARNEVAL + CANIS 97/96 STIPULE LENGTH (CM) ANOVA TABLE

Dependent variable: STIP_LTH

Source	df	SS	MS	F-value	Pr > F
Total	59	49.737			
ENTRY	1	5.281	5.281	6.26	0.0151
BLOC	9	3.107	0.345	0.41	0.9241
Residual	49	41.349	0.844		

Grand mean = 5.007 R-squared = 0.1686 C.V. = 18.35%

LSD for ENTRY = 0.3977 S.E.D. = 0.2372

t (1-sided $\alpha=0.050$, 49 df) = 1.6766 MSE = 0.84386

ENTRY

Averages

Level --- Y --- Rank

2	5.30	1 CANIS
1	4.71	2 CARNEVAL

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AGROBASE/4

ANALYSIS OF VARIANCE

PROC ACB

11/06/97

CARNEVAL + CANIS 1997 STIPULE LENGTH (CM)ANOVA TABLE

Dependent variable: STIP_LTH

Source	df	SS	MS	F-value	Pr > F
Total	39	38.460			
ENTRY	1	6.480	6.480	6.64	0.0147
BLOC	9	3.672	0.408	0.42	0.9148
Residual	29	28.307	0.976		

Grand mean = 5.248

R-squared = 0.2640

C.V. = 18.83%

LSD for ENTRY = 0.5309

S.E.D. = 0.3124

t (1-sided $\alpha=0.050$, 29 df) = 1.6991 MSE = 0.97611

ENTRY

Averages

Level --- Y --- Rank

2	5.65	1 CANIS
1	4.85	2 CARNEVAL

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9600231

AGROBASE/4

ANALYSIS OF VARIANCE

PROC ACB

11/06/97

CARNEVAL + CANIS STIPULE LENGTH (CM) ANOVA TABLE 1996

Dependent variable: STIP_LTH

Source	df	SS	MS	F-value	Pr > F
Total	19	4.318			
ENTRY	1	0.145	0.145	0.54	0.5142
BLOC	9	1.773	0.197	0.74	0.6710
Residual	9	2.401	0.267		

Grand mean = 4.525

R-squared = 0.4440

C.V. = 11.41%

LSD for ENTRY = 0.4234

S.E.D. = 0.2310

t (1-sided $\alpha=0.050$, 9 df) = 1.8331 MSE = 0.26672

ENTRY

Averages

Level --- Y --- Rank

2	4.61	1 CANIS
1	4.44	2 CARNEVAL

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9600231

AGROBASE/4 ANALYSIS OF VARIANCE
 PROC ACB
 11/06/97 CARNEVAL + CANIS 97/96 STIPULE WIDTH (CM) ANOVA TABLE

Dependent variable: STIP_WDTH

Source	df	SS	MS	F-value	Pr > F
Total	59	10.777			
ENTRY	1	0.662	0.662	3.66	0.0585
BLOC	9	1.262	0.140	0.78	0.6402
Residual	49	8.854	0.181		

Grand mean = 2.335 R-squared = 0.1784 C.V. = 18.20%

LSD for ENTRY = 0.1840 S.E.D. = 0.1098

t (1-sided $\alpha=0.050$, 49 df) = 1.6766 MSE = 0.18068

ENTRY

Averages

Level --- Y --- Rank

2	2.44	1 CANIS
1	2.23	2 CARNEVAL

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9600231

AGROBASE/4 ANALYSIS OF VARIANCE
 PROC ACB
 11/06/97 CARNEVAL + CANIS 1997 STIPULE WIDTH (CM) ANOVA TABLE

Dependent variable: STIP_WDTH

Source	df	SS	MS	F-value	Pr > F
Total	39	8.108			
ENTRY	1	0.306	0.306	1.53	0.2247
BLOC	9	1.980	0.220	1.10	0.3958
Residual	29	5.821	0.201		

Grand mean = 2.368 R-squared = 0.2820 C.V. = 18.92%

LSD for ENTRY = 0.2407 S.E.D. = 0.1417

t (1-sided $\alpha=0.050$, 29 df) = 1.6991 MSE = 0.20073

ENTRY

Averages

Level --- Y --- Rank

2	2.46	1 CANIS
1	2.28	2 CARNEVAL

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9600231

AGROBASE/4 ANALYSIS OF VARIANCE
 PROC ACB
 11/06/97 CARNEVAL + CANIS 1996 STIPULE WIDTH (CM) ANOVA TABLE

Dependent variable: STIP_WDTH

Source	df	SS	MS	F-value	Pr > F
Total	19	2.542			
ENTRY	1	0.392	0.392	3.93	0.0765
BLOC	9	1.252	0.139	1.39	0.3138
Residual	9	0.898	0.100		

Grand mean = 2.270 R-squared = 0.6467 C.V. = 13.92%

LSD for ENTRY = 0.2590 S.E.D. = 0.1413

t (1-sided $\alpha=0.050$, 9 df) = 1.8331 MSE = 0.09978

ENTRY

Averages

Level --- Y --- Rank

2	2.41	1 CANIS
1	2.13	2 CARNEVAL

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UNITED STATES DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE
 LIVESTOCK, POULTRY, GRAIN & SEED DIVISION
 NATIONAL AGRICULTURAL LIBRARY
 BELTSVILLE, MARYLAND 20705
 OBJECTIVE DESCRIPTION OF VARIETY
 PEA (PISUM SATIVUM)

EXHIBIT C
(Pca)

NAME OF APPLICANT(S)

Svalöf Weibull AB

VARIETY NAME OR TEMPORARY
DESIGNATION

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

S-268 81
Svalöv, SWEDEN

CARNEVAL

FOR OFFICIAL USE ONLY

PVPO NUMBER

9600231

Place the appropriate number that describes the varietal character in the boxes below.

Place a zero in first box (0 8 9 or 0 9) when number is either 99 or less or 9 or less.

1. TYPE:

 1 - GARDEN 2 - FIELD 3 - EDIBLE-PODDED

2. MATURITY:

<input type="text" value="21"/>	Node number of first bloom:	<input type="text" value="1"/> <input type="text" value="0"/> <input type="text" value="6"/>	No. of days to processing	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Heat Units
<input type="text"/> <input type="text"/>	No. of days Earlier than	<input type="text"/>	1 = ALASKA WR	2 = THOMAS LAXTON WR	3 = LITTLE MARVEL
<input type="text"/> <input type="text"/>	No. of days Later than	<input type="text"/>	4 = WANDO	5 = ALDERMAN WR	6 = AUSTRIAN WINTER

3. PLANT HEIGHT:

<input type="text"/> <input type="text" value="7"/> <input type="text" value="5"/>	CM. HIGH				
<input type="text"/> <input type="text"/>	Cm. Shorter than	<input type="text"/>	1 = ALASKA WR	2 = THOMAS LAXTON WR	3 = LITTLE MARVEL
<input type="text"/> <input type="text"/>	Cm. Taller than	<input type="text"/>	4 = WANDO	5 = ALDERMAN WR	6 = AUSTRIAN WINTER

4. VINE:

<input type="text" value="2"/>	Habit: 1 = DETERMINATE 2 = INDETERMINATE	Stockiness: 1 = SLIM (Alaska) 3 = HEAVY (Alderman) 2 = MEDIUM (Thomas Laxton WR)
<input type="text" value="1"/>	Branching: 1 = NONE (Alaska) 2 = 1-2 BRANCHES (Little Marvel) 3 = MORE THAN 2 BRANCHES (Dwarf Gray Sugar)	
<input type="text" value="1"/>	Internodes: 1 = STRAIGHT 2 = ZIG ZAG	<input type="text" value="2"/> <input type="text" value="4"/> NUMBER OF NODES

5. LEAFLETS:

<input type="text" value="4"/>	Color: 1 = LIGHT GREEN (Alaska WR) 2 = MED. GREEN (Thomas Laxton WR) 3 = DARK GREEN (Alderman) 4 = OTHER (Specify) Semi-leafless, modified to tendrils
<input type="text"/>	Wax: 1 = NONE 2 = LIGHT 3 = MEDIUM 4 = HEAVY <input type="text"/> 1 = NOT MARBLED 2 = MARBLED (Alaska)
<input type="text"/>	Number of leaflet pairs: 1 = NOT PAIRED 2 = ONE 3 = TWO 4 = THREE OR MORE

6. STIPULES:

<input type="text" value="2"/>	1 = LACKING 2 = PRESENT	<input type="text" value="2"/>	1 = NOT CLASPING 2 = CLASPING
<input type="text" value="2"/>	1 = NOT MARBLED 2 = MARBLED	<input type="text"/>	Size (Compared with leaflets): 1 = SMALLER 2 = SAME Semi-leafless 3 = LARGER
<input type="text" value="2"/>	Color (Compared with leaflets): 1 = LIGHTER 2 = SAME 3 = DARKER		

7. FLOWER COLOR:

<input type="text" value="1"/>	VENATION	<input type="text" value="1"/>	STANDARD	<input type="text" value="1"/>	WING	<input type="text" value="1"/>	KEEL	1 = WHITE 2 = GREENISH 3 = LAVENDER 4 = PURPLE 5 = RED 6 = OTHER (Specify)
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8. PODS:

☐ 2 Shape: 1 = STRAIGHT 2 = SLIGHTLY CURVED ☐ 2 End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)
☐ 2 Color: 1 = LIGHT GREEN (Alaska WR) 2 = MEDIUM GREEN 3 = DARK GREEN (Alderman)
4 = OTHER (Specify) _____
☐ 2 Surface: 1 = SMOOTH 2 = ROUGH ☐ 2 Surface: 1 = SHINY 2 = DULL
☐ 2 Borne: 1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPEE
5 = DOUBLE & TRIPLE 6 = TRIPLE 7 = OTHER (Specify) _____
☐ 7 CM. LENGTH ☐ 1 ☐ 2 MM. WIDTH (Between sutures) ☐ 7 NO. SEEDS PER POD

9. SEEDS (95--100 Tenderometer):

☐ 1 Color: 1 = LIGHT GREEN 2 = GREEN 3 = DARK GREEN 4 = OTHER (Specify) _____
Seive: % ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 AVERAGE ☐ ☐ ☐

SEEDS (Dry, Mature):

☐ 4 Shape: 1 = FLATTENED 2 = ANGULAR 3 = OVAL 4 = ROUNDED
☐ 1 Surface: 1 = SMOOTH 2 = DIMPLED ☐ 1 Surface: 1 = SHINY 2 = DULL
3 = WRINKLED
☐ 1 Color Pattern: 1 = MONOCOLOR 2 = MOTTLED 3 = STRIPED 4 = DOTTED
☐ 1 Primary Color: 1 = CREAMY-WHITE 2 = CREAM & GREEN 3 = LIGHT GREEN 4 = MEDIUM GREEN
5 = DARK GREEN 6 = BLUE-GREEN 7 = YELLOW 8 = BROWN 9 = RED
☐ Secondary Color: 10 = GRAY 11 = BLACK
☐ 1 Hilum Floor Color: 1 = WHITE 2 = TAN ☐ 2 Cotyledon Color: 1 = GREEN 2 = YELLOW 3 = ORANGE
3 BLACK
☐ 2 ☐ 3 GRAMS PER 100 SEEDS

10. DISEASE: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

<input type="checkbox"/> FUSARIUM WILT	<input type="checkbox"/> NEAR-WILT	<input type="checkbox"/> DOWNY MILDEW
<input type="checkbox"/> 1 ASCOCHYTA BLIGHT	<input type="checkbox"/> 1 POWDERY MILDEW	<input type="checkbox"/> BACTERIAL BLIGHT
<input type="checkbox"/> MOSAIC	<input type="checkbox"/> PEA ENATION MOSAIC	<input type="checkbox"/> YELLOW BEAN MOSAIC
<input type="checkbox"/> OTHER (Specify) _____		

11. INSECT: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

☐ APHIDS ☐ OTHER (Specify) _____

12. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leafiness		Fresh Seed Color	
Leaf Color		Mature Seed Color	
Pod Color		Seed Shape	
Pod Shape		Plant Habit	

COMMENTS:

APPENDIX
OBJECTIVE DESCRIPTION OF VARIETY
PEA (*Pisum sativum*)

Variety Name or Temporary Designation:

CARNEVAL

*Information transferred from exhibit C
for 'Canis' supplied by applicant AWS 7-10-98*

LEAFLET CHARACTERISTICS:

☒ Leaflet Type: 1=Leafless 2=Semi 3=Normal

STIPULE CHARACTERISTICS:

☒ Color:
1=Light-Green 2=Medium-Green 3=Dark-Green 4=Blue-Green 5=Yellow-Green 6=Other _____

Please provide example varieties of similar specified color or check varieties and stipule color.

Variety Name	Stipule Color
<i>Canis</i>	<i>2</i>

Variety Name	Stipule Color

Variety Name	Stipule Color

☒ Size: 1=Small 2=Medium 3=Large

Please provide example varieties of similar specified size or check varieties and stipule size.

Variety Name	Stipule Size
<i>Canis</i>	<i>2</i>

Variety Name	Stipule Size

Variety Name	Stipule Size

OTHER CHARACTERISTICS: Describe other characteristics that may aid in identification.

Final Denomination: 'Carneval' EXHIBIT D
 Application number: 93-186
 Application date: 26-05-93
 Applicant: Svalöf Weibull AB, Svalöv, Sweden
 Agent in Canada: Bonis & Company Ltd., Lindsay, Ontario

Variety used for comparison:

'Carneval' was compared to 'Tara' and 'Radley' as they are the most similar varieties

Description: (see comparison table on page)

Summary:

'Carneval' has vines of medium length, spherical seeds with yellow cotyledons and no leaflets.

'Carneval' is a field pea variety with a light green plant colour and no stem fasciation. It has slightly fewer nodes (including the two scale nodes and the first flowering node) than 'Tara' and 'Radley' and a medium vine length which is slightly longer than 'Radley' and slightly shorter than 'Tara'. Leaflets are absent on 'Carneval' and 'Radley' but are present on 'Tara'. Leaf and stipule waxiness is present in 'Carneval'. It has normal development of the stipules which are shorter and narrower than those of 'Radley'. 'Carneval' has sparse stipule flecking whereas 'Tara' has medium dense flecking. 'Carneval' flowers at the same time as 'Tara' and 'Radley' and produces one to two flowers per node with white coloured standards. The shape of the standard base is arched for 'Carneval' and level for 'Tara' and 'Radley'. 'Carneval' has a light green pod of medium width which is slightly longer than 'Tara' and slightly shorter than 'Radley'. Pod parchment is entirely present. It has a weak concave curvature with a blunt end whereas 'Radley' has a pointed end. The pod has many ovules which produce pale green immature seed. 'Carneval' matures at the same time as 'Radley' and slightly earlier than 'Tara'. 'Carneval' produces larger spherical seeds than 'Tara' and 'Radley' without a black colour of hilum with a simple shape to the starch grain. The cotyledons show no wrinkling and are yellow in colour whereas those of 'Radley' are green. 'Carneval' is susceptible to asochyta leaf and pod spot (Asochyta pisi) and susceptible to tolerant of powdery mildew (Erysiphe polygoni), whereas 'Tara' is resistant to powdery mildew. It has average cooking quality and a protein content lower than 'Radley'.

Origin and Breeding:

The variety was bred at Svalöf Weibull AB in Sweden. The original cross (Bohatyr x Rigel) was done in 1981. The pedigree method was used to develop 'Richmond' and it originates from a single F4 plant selection.

Tests and Trials:

The test and trials results were taken from the Prairie Registration Recommendation Committee on Grain (PRRCG) and were conducted in accordance with PRRCG protocols over a three year period (1990 to 1992).

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Svalöf Weibull AB	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME CARNEVAL
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) S-268 81 Svalöv, SWEDEN	5. TELEPHONE (include area code) 705-324-3293	6. FAX (include area code) 705-324-2550
	7. PVPO NUMBER 9400231	

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?

If no, give name of country SWEDEN

☐ YES ☒ NO

10. Is the applicant the original breeder? If no, please answer the following:

Svalöf Weibull is the original breeder.

a. If original rights to variety were owned by individual(s):

Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country _____

☐ YES ☐ NO

b. If original rights to variety were owned by a company:

Is the original breeder(s) U.S. based company? If no, give name of country _____

☐ YES ☐ NO

11. Additional explanation on ownership (If needed, use reverse for extra space):

Svalöf Weibull AB is the original breeder and owner of the Pisum sativum Field Pea variety CARNEVAL tested as experimental designation SV E 36121.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter.

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